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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,548	06/30/2000	Lincoln Dale	CISCP171	2364

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EXAMINER

CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/608,458

**Applicant(s)**

SMYERS ET AL.

**Examiner**

Anita Choudhary

**Art Unit**

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-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on October 6, 2003 has been entered. Claims 1 have been amended and are presented for further examination. New claims 33-40 have been added

Claims 1-40 are presented.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mighdoll et al. (US 6,073,168) in view of Bakke et al. (US 5,566,170).

In referring to claim 1, 15, 29, and 31, Mighdoll shows a system for retrieving client request and transcoding the request at a remote server. A database is consulted and the stored information regarding the client request is used to properly transcode the request to its destination. Mighdoll shows a system for:

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- Receiving a packet (col. 12 lines 63-67).
- Using at least a portion of the packet (address portion) to compare with a document database (fig. 9 step 901, col. 3 lines 16-18).
- Determining whether or not to redirect the received request to a selected processing device (fig. 9 step 902, col. 13 lines 20-22).
- Redirecting the received request to the selected processing device when the database indicates to redirect the received packet (fig. 9 step 906 col. 13 lines 28-30).
- Sending the received request to a destination indicated by the received packet when the database does not indicate to redirect the received packet (fig. 9 step 903, col. 13 lines 23-25).

Although Mighdoll shows substantial features of the claimed invention, Mighdoll does not show a content addressable memory. Nonetheless this feature is well known in the art, and would have been an obvious modification to the system disclosed by Mighdoll as evidenced by Bakke.

In an analogous art, Bakke shows a system for accelerating and forwarding requests. A preprocessor is utilized to identify header information in order to add a next operation for subsequent processing of the data (col. 10 lines 17-25). Bakke shows a system for:

- Receiving a request (col. 9 lines 21-28).
- Inputting at least a portion of the packet into a content addressable memory (CAM) (col. 10 lines 44-48, col. 11 lines 8-17).
- Obtaining the results from CAM indicating a forwarding type decision (col. 11 lines 1-17).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown Mighdoll, to employ the features shown by Bakke in order to increase packet throughput rates (see Bakke col. 4 lines 50-57).

In referring to claim 2, 16, and 33, Mighdoll shows a system selecting a device from a plurality of cache systems (col. 5 lines 7-19, col. 8 lines 36-43, lines 62-67).

In referring to claim 3, 17, and 34, Mighdoll shows the results indicating to redirect from a destination specified in the packet (col. 13 lines 3-15).

In referring to claim 4, 12, 18, 26, and 35, Mighdoll shows the results of redirection includes address of the selected device to which the received packet is to be sent (col. 13 lines 3-15).

In referring to claim 5, 14, 19, 28, and 36, Bakke shows the use of a CAM. Official Notice is taken on the use of ternary CAM. The use of a ternary cam, given the use of an ordinary CAM would have been an obvious modification to the system, as person of ordinary skill would have realized.

In referring to claim 6, 20, and 37, Bakke shows the header information of a packet including destination address, destination port, source address and source port and protocol, selected from to input into a CAM (col. 10 lines 17-25, col. 10 lines 44-59).

In referring to claim 7, 21, and 38, Bakke shows a CAM that includes a plurality of entries including a bits-to-match field, an action field (modification field), and redirection destination field (col. 11 lines 18-40).

In referring to claim 8, 22, and 39, Mighdoll shows a redirection destination field identifying a cache system (fig. 6 step 604).

In referring to claim 9, 11, 23, 25, and 40, Bakke shows modification field indicates whether the received packet is to be forwarded with original destination of not (col. 11 lines 18-40).

In referring to claim 10, 24, 30, and 32, in addition to the teachings shown above in regards to claim 1, Mighdoll shows a bit values corresponding to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's bit values (fig. 9 step 901 and 902, col. 13 lines 16-22).

In referring to claim 13 and 27, Bakke shows where the set of bit values includes as least 1 or a 0 value and a "don't care" value (col. 13 lines 57-67).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268.

The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

AC  
January 5, 2003



GLENTON B. BURGESS  
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